## Amendments to the Claims

This listing of claims provided below replaces all prior versions and listings of claims in the application. New claims 83-126 have been added by this second preliminary amendment:

*Listing of Claims:*

1 – 64. (canceled).

65. (Previously presented) An electrical device comprising a transformer and a dielectric fluid in the transformer, the dielectric fluid consisting essentially of at least one vegetable oil having a viscosity of 2 to 15 cSt at 100 °C and less than 100 cSt at 40 °C.

66. (Previously presented) The electrical device of claim 65, wherein the vegetable oil has an open cup fire point greater than 300 °C.

67. (Previously presented) The electrical device of claim 65, wherein the vegetable oil is selected from the group consisting of soya, sunflower, rapeseed, cottonseed, olive, safflower, jojoba, lesquerella, veronia oils, and combinations thereof.

68. (Previously presented) The electrical device of claim 65, wherein the vegetable oil is soya oil.

69. (Previously presented) The electrical device of claim 65, wherein the dielectric fluid further comprises an antioxidant.

70. (Previously presented) The electrical device of claim 69, wherein the antioxidant is selected from a group consisting of BHA, BHT, TBHQ, THBP, rosemary oil, popyl gallate, α-tocopherol, β-tocopherol, δ-tocopherol, and combinations thereof.

71. (Previously presented) The electrical device of claim 65, wherein the dielectric fluid further comprises at least one of a low temperature additive and an antimicrobial additive.

72. (Currently Amended) The electrical device of claim 65, wherein the transformer comprises an antioxidant ~~oxygen scavenging compound~~.

73. (Previously presented) An electrical device comprising a dielectric fluid therein, wherein the dielectric fluid comprises at least one vegetable oil having a viscosity of 2 to 15 cSt at 100 °C and less than 100 cSt at 40 °C, and wherein the dielectric fluid is biodegradable.

74. (Previously presented) A dielectric fluid for a transformer, comprising at least one vegetable oil having a viscosity of 2 to 15 cSt at 100 °C and less than 100 cSt at 40 °C, and an open cup fire point of greater than 300 °C, wherein the dielectric fluid is biodegradable.

75. (Previously presented) A dielectric fluid for a transformer, comprising at least one vegetable oil having a viscosity of 2 to 15 cSt at 100 °C and less than 100 cSt at 40 °C, and an open cup fire point of greater than 300 °C, wherein the dielectric fluid is biodegradable and free of chlorinated aromatic compounds.

76. (Previously presented) A method of using an electrical device comprising employing in the electrical device a dielectric fluid comprising at least one vegetable oil having a viscosity of about 2 to about 15 cSt at 100 °C, and less than about 100 cSt at less than 40 °C, wherein the dielectric fluid is biodegradable.

77. (Previously presented) A dielectric fluid for a transformer, wherein the dielectric fluid consists essentially of at least one vegetable oil having a viscosity of 2 to 15 cSt at 100 °C and less than 100 cSt at 40 °C, and wherein the dielectric fluid is biodegradable.

78. (Currently Amended) A transformer comprising

one or more antioxidants ~~oxygen-scavenging compounds~~; and

a dielectric insulating fluid comprising a vegetable oil having at least one degree of unsaturation, and wherein the dielectric insulating fluid: (i) is free of chlorinated aromatic compounds; (ii) has a viscosity of between 2 and 15 cST at 100 °C and less than 110 cST at 40 °C; and (iii) has a fire point of greater than 300 °C.

79. (Currently amended) A dielectric insulating fluid for a transformer, the fluid comprising

one or more antioxidants ~~oxygen-scavenging compounds~~; and

a vegetable oil having at least one degree of unsaturation,

wherein the dielectric insulating fluid: (a) is free of chlorinated aromatic compounds; (b) has a viscosity of between 2 and 15 cST at 100 °C and less than 110 cST at 40 °C; and (c) has a fire point of greater than 300 °C.

80. (Currently presented) A dielectric insulating fluid for use in a transformer comprising:

(a) a vegetable oil having a viscosity of between 2 and 15 cST at 100 °C and less than 110 cST at 40 °C, and a fire point of greater than 300 °C; and

(b) one or more antioxidants ~~oxygen-scavenging compounds~~;

wherein said dielectric insulating fluid is substantially free of chlorinated aromatic compounds.

81. (Currently Amended) A transformer comprising a dielectric insulating fluid therein, the dielectric insulating fluid comprising

one or more antioxidants ~~oxygen scavenging compounds~~; and

a vegetable oil having at least one degree of unsaturation;

wherein the dielectric insulating fluid: (a) is biodegradable; (b) has a viscosity of between 2 and 15 cST at 100 °C and less than 110 cST at 40 °C; and (c) has a fire point of greater than 300 °C.

82. (Currently Amended) A biodegradable dielectric insulating fluid for a transformer, the dielectric insulating fluid comprising:

a vegetable oil having at least one degree of unsaturation; and

one or more antioxidants ~~oxygen scavenging compounds~~,

wherein the dielectric insulating fluid has a viscosity of between 2 and 15 cST at 100 °C and less than 110 cST at 40 °C, has a fire point of greater than 300 °C, and is biodegradable.

83. (New) A method of using a transformer comprising employing in the transformer a dielectric fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is naturally degradable.

84. (New) The method according to claim 83, wherein the fluid is substantially free of halogenated hydrocarbon compounds.

85. (New) The method according to claim 83, wherein the dielectric fluid is food grade.

86. (New) The method according to claim 83, wherein the dielectric fluid is substantially free of chlorinated hydrocarbon compounds.

87. (New) The method according to claim 83, wherein the antioxidant is dissolved in the vegetable oil.

88. (New) The method according to claim 83, wherein the dielectric fluid is a natural food product.

89. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is substantially free of halogenated aromatic compounds.

90. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is biodegradable.

91. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is free of chlorinated aromatic compounds.

92. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is a natural food product.

93. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is food grade.

94. (New) A method of using a transformer comprising employing in the transformer a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) at least one additive;

wherein the dielectric fluid is naturally degradable, and the additive is present in an amount that is not detrimental to the natural degradability of the dielectric fluid.

95. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is naturally degradable.

96. (New) The transformer of claim 95 wherein the dielectric fluid is substantially free of halogenated hydrocarbon compounds.

97. (New) The transformer of claim 95 wherein the dielectric fluid is food grade.

98. (New) The transformer of claim 95 wherein the dielectric fluid is substantially free of chlorinated hydrocarbon compounds.

99. (New) The transformer of claim 95 wherein the antioxidant is dissolved in the vegetable oil.

100. (New) The transformer of claim 95 wherein the dielectric fluid is a natural food product.

101. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is substantially free of halogenated aromatic compounds.

102. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is biodegradable.

103. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is free of chlorinated aromatic compounds.

104. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is a natural food product.

105. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) an antioxidant;

wherein the dielectric fluid is food grade.

106. (New) A transformer comprising a tank housing a transformer core/coil assembly and a dielectric insulating fluid, the fluid comprising:

(a) a vegetable oil having at least one degree of unsaturation, a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

(b) at least one additive;

wherein the dielectric fluid is naturally degradable, and the additive is in an amount that is not detrimental to the natural degradability of the dielectric fluid.

107. (New) A transformer comprising a tank housing a transformer core/coil assembly and a vegetable oil-based dielectric fluid, the fluid comprising:

at least one vegetable oil comprising triglycerides; and

at least one antioxidant present in an effective amount for reducing the oxidation rate of the triglycerides in said oil;

wherein the dielectric fluid is naturally degradable.

108. (New) The transformer of claim 107 , wherein the at least one vegetable oil is derived from a plant selected from soya, sunflower, rapeseed, cottonseed, olive, safflower, jojoba, lesquerella, and veronia.

109. (New) The transformer of claim 107, wherein the at least one antioxidant is present in an amount that is not detrimental to the natural degradability of the dielectric fluid.

110. (New) The transformer of claim 107, wherein the antioxidant comprises tertiarybutyl hydroxyquinone (TBHQ).

111. (New) The transformer of claim 107, wherein the tank further comprises a container having an oxygen scavenging material therein.

112. (New) A transformer comprising a tank housing a transfer core/coil assembly and a vegetable oil-based dielectric fluid, the fluid comprising:

sunflower oil; and

an antioxidant;

wherein the dielectric fluid is naturally degradable.

113. (New) The transformer of claim 112, wherein the antioxidant is present in an amount that does not substantially change the natural degradability of the fluid.

114. (New) A method of using a transformer comprising employing in the transformer a dielectric fluid, the fluid comprising:

at least one vegetable oil comprising triglycerides, the oil having a viscosity between 2 and 15 cSt at 100 °C and less than 100 cSt at 40 °C; and

at least one antioxidant present in an effective amount for reducing the oxidation rate of the triglycerides in said oil;

wherein the dielectric fluid is naturally degradable.

115. (New) A method of using a transformer comprising employing in the transformer a dielectric fluid, the fluid comprising:

at least one vegetable oil comprising triglycerides, the oil having a viscosity between 2 and 15 cSt at 100 °C and less than 100 cSt at 40 °C; and

at least one additive;

wherein the dielectric fluid is naturally degradable and the additive is present in an amount that is not detrimental to the natural degradability of the dielectric fluid.

116. (New) A transformer comprising a tank housing a transformer core/coil assembly and a vegetable oil-based dielectric fluid, the fluid comprising

a vegetable oil, the oil having a viscosity between 2 and 15 cSt at 100 °C and less than 100 cSt at 40 °C and comprises an oleate modified oil; and

at least one additive;

wherein the dielectric fluid is naturally degradable.

117. (New) The transformer of claim 116, wherein the oil comprises 75% by weight oleate modified oil and 25% by weight soybean oil.

118. (New) The transformer of claim 116, wherein the oil comprises 50% by weight oleate modified oil and 50% weight soybean oil.

119. (New) The transformer of claim 116, wherein the oil further comprises a second vegetable oil, and wherein the oil comprises 25% by weight soybean oil and 75% by weight of said second vegetable oil selected from the group consisting of rapeseed oil and sunflower oil.

120. (New) A method of using a transformer comprising a tank housing a transformer core/coil assembly and a vegetable oil-based dielectric fluid, the fluid comprising

a vegetable oil, the oil having a viscosity between 2 and 15 cSt at 100 °C and less than 100 cSt at 40 °C and comprises an oleate modified oil; and

at least one additive;

wherein the dielectric fluid is naturally degradable.

121. (New) A transformer comprising a tank housing a transformer core/coil assembly and a vegetable oil-based dielectric fluid, the fluid comprising

a food grade vegetable oil having a viscosity between 2 and 15 cSt at 100° C and less than 100 cSt at 40° C, and an open cup fire point above 300° C; and

an additive substantially free of chlorinated hydrocarbon compounds;

wherein the dielectric fluid is naturally degradable.

122. (New) A method of using a transformer comprising employing in said device a dielectric fluid consisting essentially of at least one vegetable oil, wherein said vegetable oil is substantially free of chlorinated compounds and has a viscosity between 2 and 15 cSt at 100° C., and less than about 100 cSt at 40° C., and wherein said dielectric fluid is food grade.

123. (New) A transformer comprising a tank for holding a dielectric fluid wherein said fluid consists essentially of one or more vegetable oils that are free of chlorinated compounds, wherein said vegetable oils have a viscosity between about 2 and about 15 cSt at 100° C, and less than about 100 cSt at 40° C, and wherein said dielectric fluid is food grade.

124. (New) A method of using a transformer comprising employing in said device a food grade dielectric fluid consisting essentially of at least one vegetable oil, wherein said vegetable oil is substantially free of chlorinated compounds.

125. (New) A transformer having incorporated therein a biodegradable dielectric fluid consisting essentially of one or more vegetable oils that are free of chlorinated compounds.

126. (New) A method for retrofilling a transformer, comprising:

(a) removing an existing dielectric fluid from the transformer;

(b) drying the transformer; and

(c) replacing the existing dielectric fluid with a food grade dielectric fluid consisting essentially of one or more vegetable oils that are free of chlorinated compounds, wherein said vegetable oils have a viscosity between about 2 and about 15 cSt at 100° C., and less than about 110 cSt and 40° C.

## REMARKS

In this Second Preliminary Amendment, previously presented claims have been amended for clarity and new claims 83-126 have been added. Applicants respectfully request that the newly added claims be examined along with those previously presented.

Enclosed is a $2,976.00 check for excess claim fees. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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